

[54] **AUTOMATED SIGNATURE VERIFICATION SYSTEM**[75] Inventor: **Ping-Chien Chuang**, Irving, Tex.[73] Assignee: **Recognition Equipment Incorporated**, Dallas, Tex.[22] Filed: **June 4, 1976**[21] Appl. No.: **692,768**[52] U.S. Cl. **340/146.3 SY**[51] Int. Cl.² **G06K 9/00**[58] Field of Search **340/146.3 SY, 146.3 SG, 340/146.3 R**[56] **References Cited****UNITED STATES PATENTS**

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Signature verification where an image mosaic for a signature to be verified is stored in a memory and wherein a prototype feature set for said signature is stored in memory. Binary signals representative of the location and magnitude of positive and negative peaks in mosaic and the stroke character in the region of each of said peaks are generated. A two-dimensional feature set patterned after the prototype set is stored with the signals ordered in dependence upon the occurrence of the peaks in the signature and accompanied by (i) peak rank in terms of peak magnitude and (ii) stroke character in the vicinity of each peak. The feature vector set is then compared with the prototype vector set and identity is signaled when within predetermined limits the feature set matches the prototype set.

16 Claims, 14 Drawing Figures